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820 First Street, NE, Suite 510, Washington, DC 20002
Tel: 202-408-1080 Fax: 202-408-1056 center@cbpp.org www.cbpp.org
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# HOW THE INDIVIDUAL ACCOUNTS IN THE PRESIDENT'S NEW PLAN WOULD WORK 

# Plan Would Allow Individuals to Mortgage Half of Their Social Security Benefit 

by Jason Furman

In his State of the Union Address, President Bush outlined some of the details of the private accounts he is proposing but did not mention a critical fact about those accounts individuals who chose to take up these accounts also would get a large, automatic reduction in their Social Security benefit. In effect, the President's plan would allow an average earner to mortgage about half of his or her Social Security benefit. The worker essentially would borrow money against about half of his or her benefit, invest the money, and then repay the borrowed money to the Social Security trust fund in the form of an automatic benefit reduction at retirement. The benefit reduction would remain in effect for the rest of the worker's life. (The President also did not note that his private-account proposal would do nothing to improve Social Security's solvency - something a senior White House official acknowledged at a media briefing earlier on February 2 - and the President declined to propose or endorse any policy that would restore solvency.)

Under reasonable assumptions developed and used by the Congressional Budget Office (which take into account the greater risk of stocks over bonds), this automatic benefit reduction would eliminate the entire value of the balances in the private accounts. In effect, the automatic benefit reduction would constitute a 100 percent tax on the retirement savings in those accounts. (Even under the optimistic assumptions used by a senior Administration official in a media briefing on February 2, the automatic reduction in the Social Security benefit would wipe out more than two-thirds of the value of the private account.) The private accounts thus offer considerably less than advertised.

A senior Administration official admitted this point in his background briefing on February 2:
"...in return for the opportunity to get the benefits from the personal account, the person foregoes a certain amount of benefits from the traditional system. Now, the way that election is structured, the person comes out ahead if their personal account exceeds a 3 percent real rate of return, which is the rate of return that the trust fund bonds receive. So, basically, the net effect on an individual's benefits would be zero if his personal account earned a 3 percent real rate of return."

## How the Private Accounts Would Work

When fully phased in, workers who chose to participate in the private accounts would have 4 percent of their wages diverted into the accounts. ${ }^{1}$ At retirement, workers with private accounts would be subject to a reduction in their Social Security benefits equivalent to the amount that would be in their account if the payroll taxes diverted to the account had earned interest at the same rate as the rate paid on Treasury bonds.

To see how this would work in practice, suppose that Ms. Jackson is an average earner born in 1990, who starts to contribute 4 percent of payroll to the accounts in 2011, the first year the program is fully effective. ${ }^{2}$ When she retires, Ms. Jackson's Social Security benefits will be reduced by an amount equivalent to the monthly income she could receive from her private account for the rest of her life (assuming she has normal live expectancy for someone reaching retirement age) if the balance in her account equaled the funds deposited in the account plus interest earnings equal to 3 percent above the inflation rate (which is the Social Security Trustees' projection of the Treasury bond rate).

- If the earnings in Ms. Jackson's account grew at a rate of 3 percent above the inflation rate, the funds in her account would exactly offset the reduction in her Social Security benefits. In dollar terms, her account would contain $\$ 152,000$ (in 2004 dollars) when she retired, and her Social Security benefits would be reduced by an amount equivalent to the income from $\$ 152,000$, or nearly $\$ 1,000$ per month. (This is a 50 percent reduction in her scheduled Social Security benefit. ${ }^{3}$ ) Thus the expected income from the private account would be exactly offset by the reduction in her Social Security benefits.
- If Ms. Jackson's account earned more than 3 percent above inflation, it would more than offset the benefit cut imposed on holders of private accounts. If, for example, her account grew at an annual rate of 4.6 percent above the inflation rate, it would total $\$ 222,000$ upon her retirement. ${ }^{4}$ After the $\$ 152,000$ reduction in her Social Security benefits was netted out, she would be left with an increase in total income (from Social Security and the private account) equivalent to the income from $\$ 70,000$, an amount equal to about one-third of her account.
- On the other hand, if Ms. Jackson's account earned less than 3 percent above inflation, it would be insufficient to offset the additional Social Security benefit cut that would be imposed on holders of private accounts, and she would be poorer in old age as a result of having opted for the private account.

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## New White House Details Show the Proposed Private Accounts Would Worsen Social Security's Finances

A fact sheet released by the White House on February 3 acknowledged that retirees who receive a real rate of return on their private accounts equal to three percent above inflation (which is the Congressional Budget Office's projected rate of return on such accounts, with risk adjustment) would not benefit from the accounts. Their private account balances would be offset in full by the Social Security benefit reductions to which they would be subject in return for electing the private accounts.

But the White House fact sheet also stated that, "Even if the worker were only to break even financially, he would be better off because of his ownership rights: If he were to die before retirement age, he would have an asset to pass on to his loved ones; If he were to divorce, his account would be marital property."

The White House is indicating that no offset would apply to private accounts in the case of divorce or death prior to retirement. But this also means that all of the private account contributions for such workers would represent a net loss for Social Security and a net cost for the budget. By itself, this proposal thus would worsen the solvency of Social Security. As a result, even deeper cuts in Social Security benefits would be required to restore solvency.

It also may be noted that the existing Social Security system provides survivors benefits and benefits for divorced spouses. If we wanted to make those benefits more generous, we could add a lumpsum payout to the exiting Social Security system that would be equivalent to what such individuals would receive from private accounts under the President's proposal, and we could do so at similar cost. But most analysts would view such a change in Social Security as unwise, because it would entail adding new benefits to Social Security before proposing any steps to restore the program's long-term solvency.

The White House proposal has the same shortcoming: it would make Social Security's shortfall larger. It is not accompanied at this time by any by proposal to make up for this worsening of Social Security's financial condition. And, as noted, the end result would be larger Social Security benefit reductions.

One reason why Ms. Jackson's account might earn too little to offset the additional reduction in Social Security benefits is that the administrative fees for her account might exceed the Social Security actuaries' estimate of 0.3 percent per year. Administrative costs have proven significantly higher than that for the private accounts established in the United Kingdom and in many private pension plans in the United States. A recent Center for Retirement Research analysis explains why administrative costs for private accounts may exceed 0.3 percent per year. ${ }^{5}$

Another reason why Ms. Jackson's account might earn too little to offset the benefit cut is that it might lose money in the financial markets. Ms. Jackson would be at particular risk of such an outcome if she retired in a year that the stock market was down and converted her account to an annuity. Table 1 summarizes these three hypothetical outcomes for Ms. Jackson's investments.

[^1]As Table 1 shows, the President's plan would allow individuals, in effect, to mortgage half of their currently scheduled Social Security benefits. They would be allowed to borrow as much money as could be subsequently repaid by cutting their Social Security benefit in half. They then could use the borrowed funds for a limited set of investment options. As a result, the private accounts would not represent wealth creation but a loan.

As a result of the private accounts plan, the guaranteed Social Security benefit would replace only 18 percent of the earnings of an average earner who retires at 65 , as compared to 36 percent under current law. The President's plan would have to include large additional benefit cuts to restore Social Security solvency, however, since the President again ruled out increased payroll tax revenues (and since, as noted, the President's private accounts proposal does nothing to improve Social Security solvency). As a result of these additional benefit reductions, the percentage of average wages that Social Security benefits replace would be substantially lower then 18 percent.

Part of this reduction in guaranteed benefits would be offset by income from the private accounts. But in the process, the secure, guaranteed tier of Social Security benefits would be greatly reduced and replaced in part by investment accounts with uncertain returns.

## What Would Happen to Total Benefits?

Based on the Congressional Budget Office's methodology for estimating the income from private accounts (which takes into account the greater risk of stocks, as compared to bonds), the private accounts in the President's plan would make no contribution to a retiree's expected benefit. CBO specifies that its analysis "uses a risk-adjusted return of 3.0 percent (the expected 3.3 percent return on Treasury bonds less administrative expenses of 0.3 percent)." ${ }^{6}$ As the senior Administration official acknowledged in his briefing, at a 3 percent real rate of return, the private accounts would do nothing to attenuate the other benefit cuts that the President eventually includes in his plan to restore Social Security solvency. The added income from the accounts would simply equal the Social Security benefit reduction imposed to repay Social Security for the diversion of payroll tax revenue to the private accounts.

Furthermore, a senior Administration official acknowledged in his briefing on February 2 that the private accounts in the plan would do nothing to extend the solvency of Social Security, stating, "So in a long-term sense, the personal accounts would have a net neutral effect on the fiscal situation of the Social Security and on the federal government." ${ }^{, 7}$ (See the box on page 3 for a discussion of how the White House's subsequent statement on February 3 that the private accounts would benefit heirs and divorced spouses flatly contradicts the statement the senior Administration official made on February 2 that the accounts would not worsen Social Security's financial condition.)

[^2]| Table 1 |  |  |  |
| :---: | :---: | :---: | :---: |
| The Value of the Individual Accounts Under Different Return Scenarios |  |  |  |
|  | Low Return Scenario | Baseline Return (Risk-adjusted) | High Return (Not risk-adjusted) |
| Assumed Return | 1.5 percent | 3 percent | 4.6 percent |
| Gross account at retirement |  |  |  |
| Assets | \$109,288 | \$151,990 | \$221,552 |
| Annuity Value | \$7,869 | \$10,943 | \$15,952 |
| Amount repaid to Social Security at retirement |  |  |  |
| Assets | -\$151,990 | -\$151,990 | -\$151,990 |
| Annuity Value | -\$10,943 | -\$10,943 | -\$10,943 |
| \% Reduction in the Scheduled Social Security Benefit | -50\% | -50\% | -50\% |
| Net value |  |  |  |
| Assets | -\$42,702 | \$0 | \$69,562 |
| Annuity Value | -\$3,075 | \$0 | \$5,008 |
| \% of Scheduled Benefit | -14\% | 0\% | 23\% |
| Effective tax rate on assets in the accounts <br> (This represents the Social Security benefit reduction to repay the Trust Fund as a percentage of the assets in the individual account.) | 139\% | 100\% | 69\% |
| Note: All numbers are in inflation-adjusted 2004 dollars and use Social Security Trustees' assumptions. Rates of return are inflation-adjusted. The example assumes that a scaled-medium earner makes the maximum contribution from age 21 in 2011 to age 64 in 2054 and retires at age 65. The analysis assumes an actuarially fair annuity rate of 7.2 percent - that is each $\$ 100$ of assets in converted into an initial annual payment of $\$ 7.20$, which grows with inflation thereafter and is paid each year until the beneficiary's death. |  |  |  |

The principles that the President directed his Social Security Commission to follow, and that he subsequently reaffirmed, call for no new revenue-raising measures to help close the shortfall. If revenues are ruled out, the $\$ 3.7$ trillion 75 -year gap would have to be closed entirely through cuts in Social Security benefits.

The one proposal that the President's Social Security Commission advanced to close the gap through benefit cuts alone was to change the formula for computing initial Social Security benefits from one that uses "wage indexing" to one that uses "price indexing." Administration officials have talked up this proposal in recent weeks. If the Administration uses price indexing to restore actuarial balance, then the benefit reductions under the plan that the Administration otherwise outlined on February 2 would be very large. For instance, a worker born in 2000 who has average wages, participates in the private accounts, and retires in 2065 would have total benefits (from Social Security and the private account) that are 50 percent below the Social Security benefit scheduled under current law (and 34 percent below what Social Security would be able to pay even if no steps are taken to restore solvency). This estimate and others in Table 2

Table 2
Benefit Cuts With Price Indexing and the Private Accounts That the White House Described Today

| First-Year Annual Benefits for the Median Worker in Middle of the Income Scale |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10-Year <br> Birth Cohort <br> Starting in Year | Current Law Benefits |  | White House Plan, with Price Indexing |  |  |
|  | Scheduled Benefits (\$2004) | Payable Benefits (\$2004) | Benefits (Social Security Plus Private Accounts) (\$2004) | Percentage Reduction, Compared to Scheduled Benefits | Percentage Reduction, Compared to Payable Benefits |
| 1940 | \$14,900 | \$14,900 | \$14,840 | -0.4\% | -0.4\% |
| 1950 | 15,200 | 15,300 | 13,994 | -8\% | -9\% |
| 1960 | 15,500 | 15,500 | 12,742 | -18\% | -18\% |
| 1970 | 17,700 | 17,700 | 12,841 | -27\% | -27\% |
| 1980 | 20,500 | 19,700 | 13,097 | -36\% | -34\% |
| 1990 | 23,300 | 18,100 | 13,104 | -44\% | -28\% |
| 2000 | 26,400 | 19,900 | 13,092 | -50\% | -34\% |

Source: The columns for scheduled and payable benefits are taken directly from CBO, "Long-term Analysis of Plan 2 of the President's Commission to Strengthen Social Security," 2004. The columns on the plan are calculated using CBO assumptions and methodology (including an adjustment to account for the higher risk on investing in stocks, as compared to Treasury bonds), assuming the change to price indexing goes into effect in 2011 and that the individual account offset rate is set at the rate for Treasury bonds. The benefits are for a worker who initially claims benefits at age 65 .
use the Congressional Budget Office's methodology for computing the benefits levels under the proposed private accounts and "price indexing."

## Appendix: Why Should Returns Be Risk Adjusted?

The central example in this analysis assumes that the higher returns on stocks and other investments that carry greater risk than Treasury bonds are adjusted to reflect the additional risk. The Congressional Budget Office, the Bush administration's Office of Management and Budget, and leading economists incorporate the effects of risk when they calculate the expected returns of a portfolio that includes stocks. The basic concept they apply is that there is no such thing as a "free lunch" and that investments made in the stock market produce higher average returns over time but also carry a higher risk and may perform poorly and lose money.

The difference between the average return on stocks (often referred to as "equities") and the average return on risk-free Treasury bonds is known as the "equity premium." According to standard economic theory, this premium represents compensation for the additional risk associated with investing in stocks. In other words, since investments in stocks are riskier and can lose money, average returns on stocks have to be higher over time, or else no one would invest in them. Most policy analysts subtract this risk premium when projecting the returns on a portfolio. This produces what is known as a "risk-adjusted" rate of return.

This risk adjustment reflects the fact that, even over long periods, equities can carry substantial risk. For example, over the past 130 years, while average stock returns have exceeded average bond returns, there have been eighteen 15-year periods in which the cumulative return on stocks was lower than the cumulative return on relatively safe bonds. In six 15 -year periods (the periods ending in 1920, 1921, 1979, 1980, 1981, and 1982), the inflationadjusted rate of return on stocks actually was negative. ${ }^{8}$

CBO discussed this issue in a report it issued, in which it examined the effect of having the U.S. Government shift some of its own assets from Treasury bonds to stocks. CBO explained: "Government investment in private securities does not offer a free lunch: although it would increase the expected value of budgetary resources, it would do so at the cost of exposing the government, future taxpayers, and beneficiaries of federal programs to greater risk. If that risk was taken into account, the returns on private securities would be no greater than the returns on government securities." ${ }^{\prime 9}$ In other words, CBO concluded that the rate of return that should be used in assessing the returns that stock-market investments would produce is the "risk-adjusted" rate of return. The risk-adjusted rate of return is simply the expected rate of return on Treasury bonds, which are essentially risk free if held to maturity.

The Bush administration's OMB applies the same principle in projecting the rate of return on stock investments made by the Railroad Retirement Board, the equivalent of the Social Security system for railroad workers. OMB has explained that "Equities and private bonds earn a higher rate of return on average than the Treasury rate, but that return is subject to greater uncertainty. Sound budgeting principles require that estimates of future trust fund balances reflect both the average return and the cost of risk associated with the uncertainty of that return....Economic theory suggests, however, that the difference between the expected return of a risky liquid asset and the Treasury rate is equal to the cost of the asset's additional risk as

[^3]priced by the market. Following through on this insight, the best way to project the rate of return on the Fund's balances is to use a Treasury rate." ${ }^{10}$ In other words, in projecting the returns on the stock investments of the Railroad Retirement Board, OMB adjusts the returns for risk by assuming that the rate of return is equal to the rate paid on Treasury bonds.

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[^0]:    ${ }^{1}$ Initially the maximum contribution to the accounts would be set at $\$ 1,000$, but this limit would increase annually until anyone could contribute up to 4 percent of their taxable earnings into the account.
    ${ }^{2}$ This example assumes that Ms. Jackson is what the Social Security actuaries call a "scaled medium-earner." That is, she has a realistic pattern of earnings that are relatively low in her 20s but grow over time, and that by the end of her working life, average out to the same as the wages of the average earner in the economy.
    ${ }^{3}$ This example assumes that Ms. Jackson does not pay any administrative costs if she chooses to hold Treasury securities. That is, the entire administrative cost would be subsidized by the taxpayers.
    ${ }^{4}$ This is the rate assumed by the Social Security actuaries. It does not adjust for the additional risk from investing in stocks.

[^1]:    ${ }^{5}$ Melissa Favreault et al., 2004, "Reform Model Two of the President's Commission to Strengthen Social Security: Distributional Outcomes Under Different Economic and Behavioral Assumptions," Center for Retirement Research Working Paper 2004-19.

[^2]:    ${ }^{6}$ CBO, "Long-Term Analysis of the President's Commission to Strengthen Social Security Plan 2," 2004.
    ${ }^{7}$ Note, the senior Administration official is assuming that the reduction in benefits - which would in effect eliminate the entire value of the individual account - would occur as scheduled. Future Congress, however, could very well decide that this is too high an effective tax rate and reduce the offset rate. The result would be that the initial debtfinancing of the plan would never be recouped.

[^3]:    ${ }^{8}$ All analysis of historic returns is from data compiled by Yale Professor Robert Shiller, available at http://www.econ.yale.edu/~shiller/data.htm.
    ${ }^{9}$ CBO, Evaluating and Accounting for Federal Investment in Corporate Stocks and Other Private Securities, p. 2, 2002, emphasis added.

[^4]:    ${ }^{10}$ Office of Management and Budget, Analytical Perspectives of the FY 2003 Budget, pp. 439-440, 2002, emphasis added.

